

# COVAX

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**WHO Member State Briefing**  
**11 Nov 2021**

## **Global COVID-19 vaccine rollout**

Dr Soumya Swaminathan, Chief Scientist (WHO)

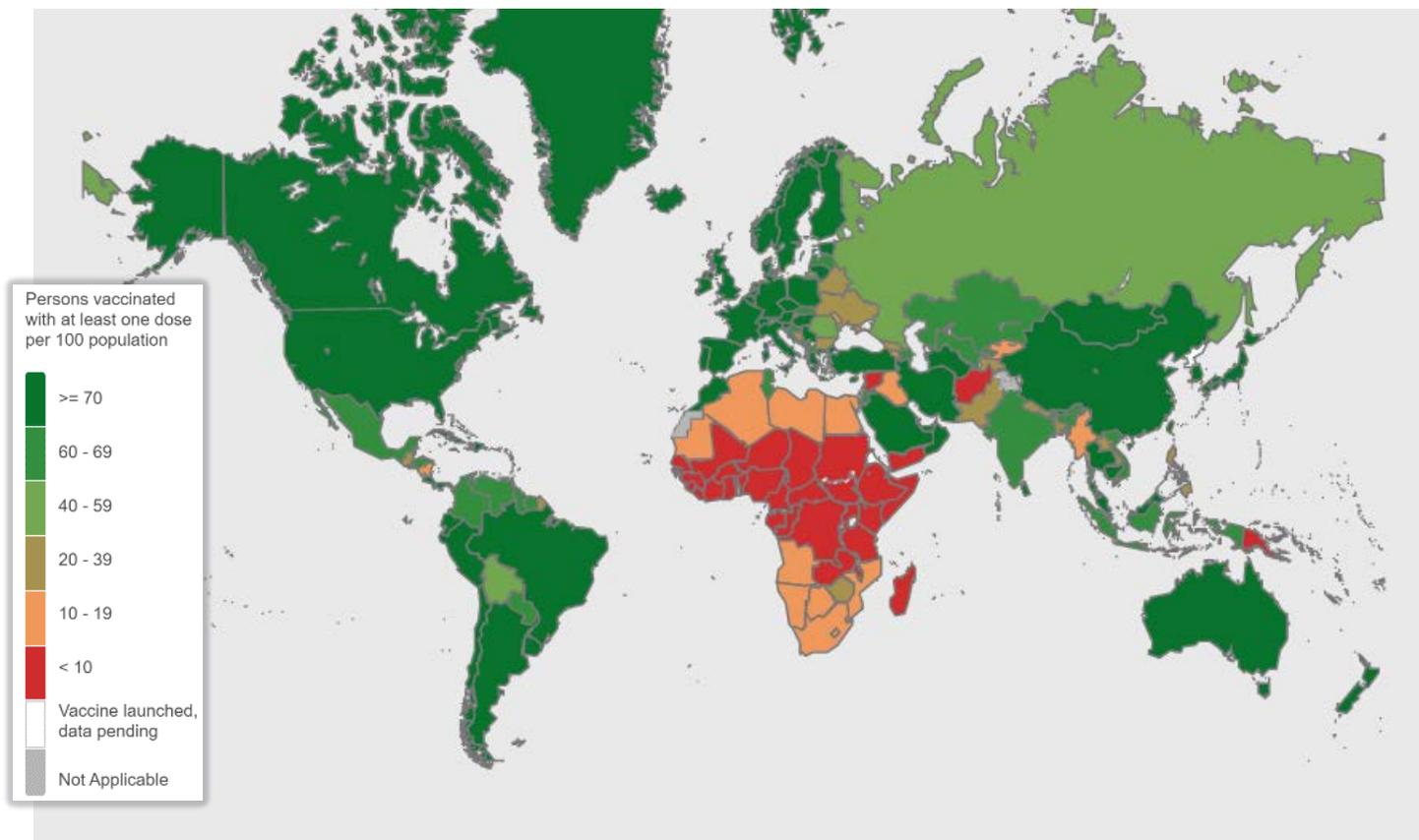
## **Accelerating COVAX Supply Situation & Action by WHO Member States**

Dr Seth Berkley, Gavi CEO

## **Content**

# While >7.3 billion doses have been administered globally, vaccine equity remains the ‘challenge of our time’

## Persons vaccinated with at least one COVID-19 dose per 100 population



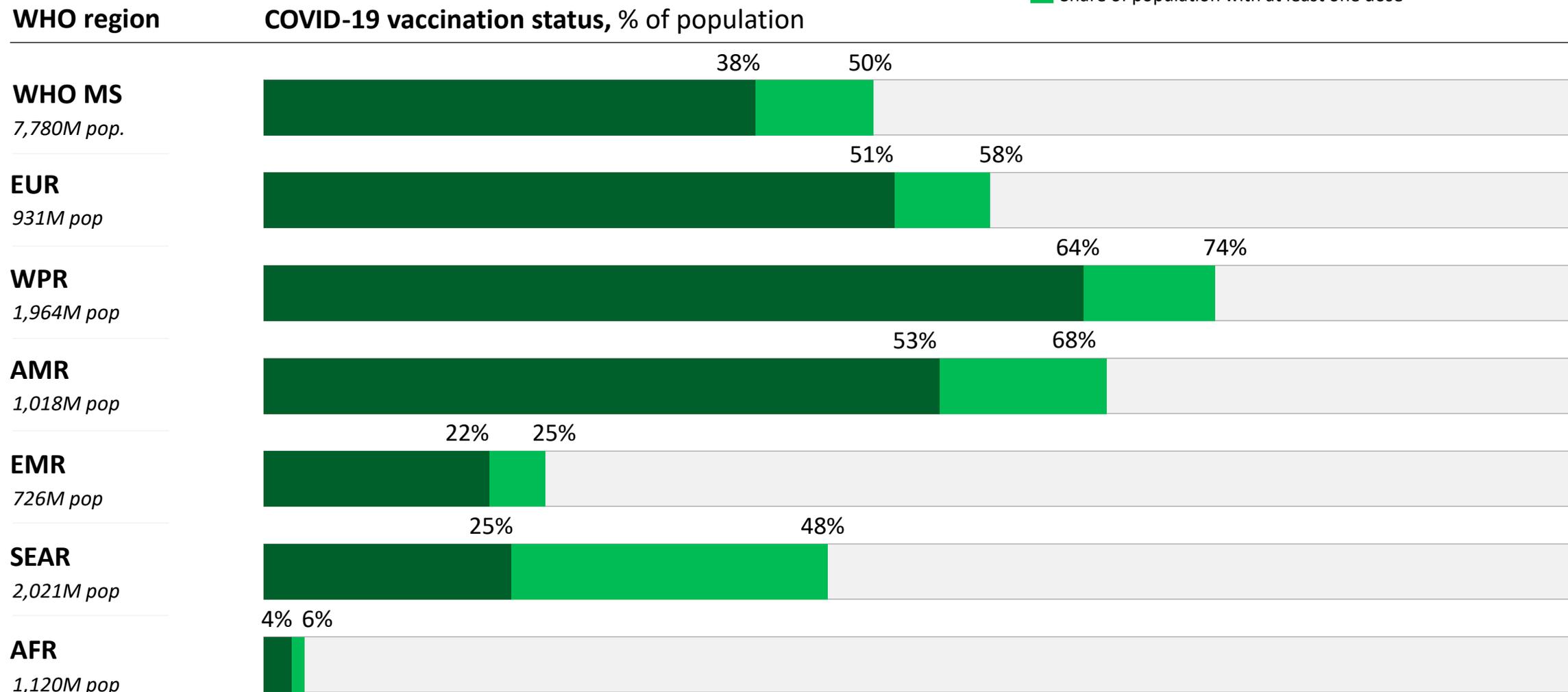
- **7,364M vaccine doses** have been administered
- **23x more doses administered per inhabitant in high income countries** than in low income Countries
- **Only 4.2% of people in low income countries** have received at least one dose

Note: The designations employed and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Source: WHO COVID-19 Dashboard

# 50% of the total population across WHO Member States have had at least one COVID-19 dose

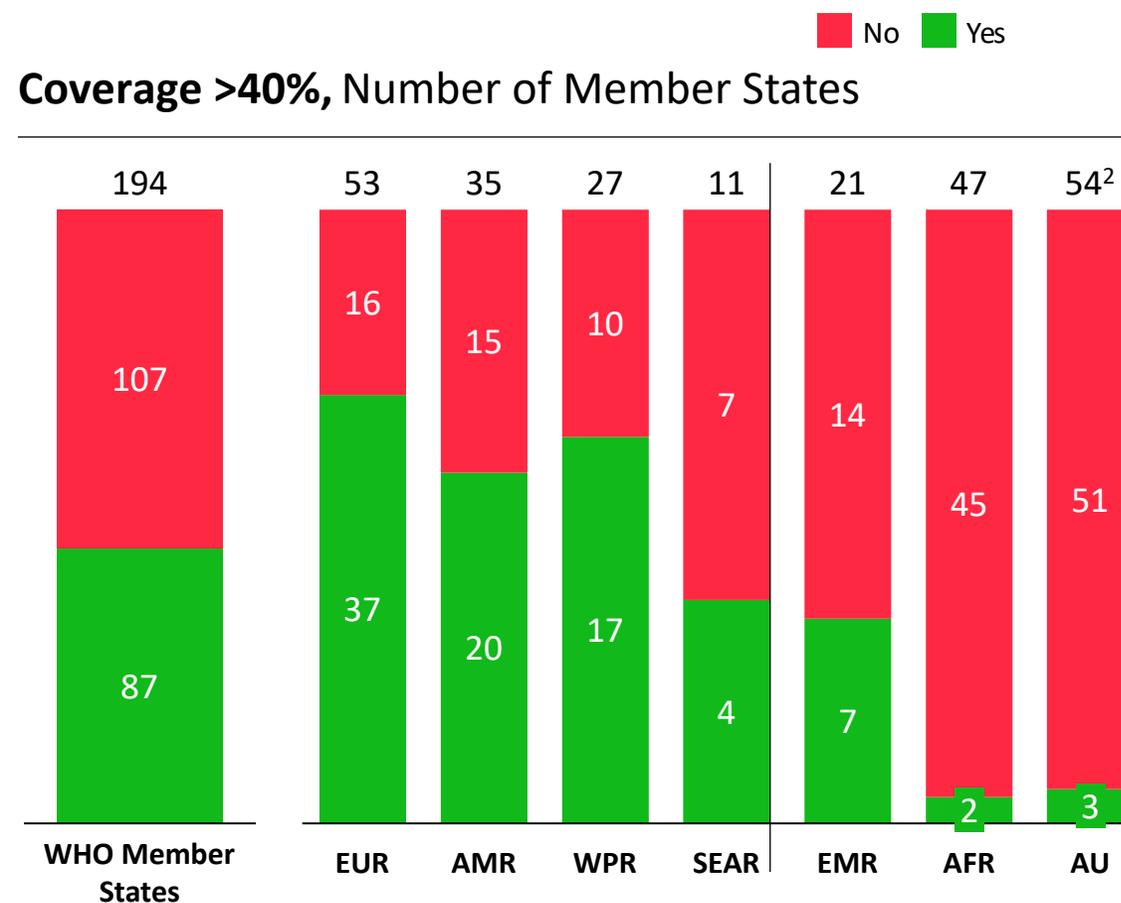
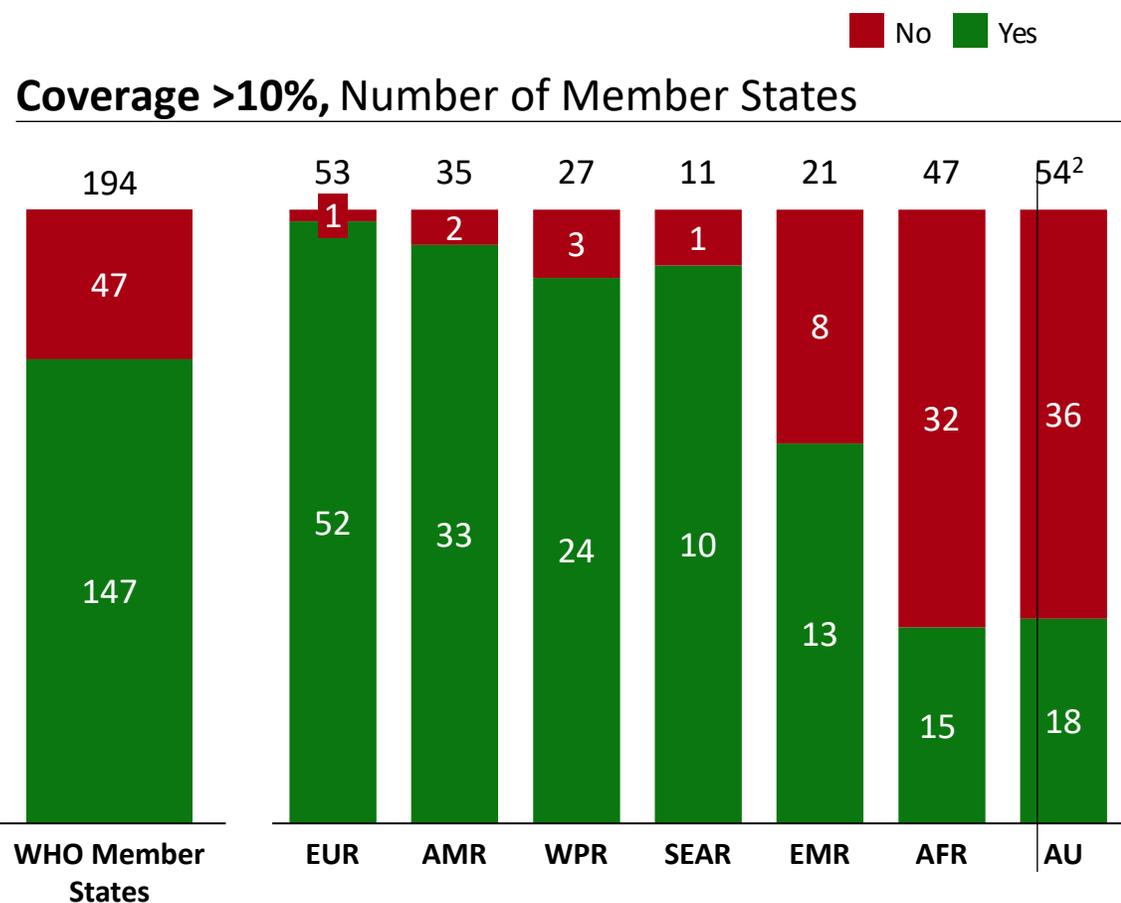
■ Share of population fully vaccinated  
■ Share of population with at least one dose<sup>1</sup>



1. Incl. fully vaccinated people || 2. Excl. fully vaccinated people  
2. ~17m decrease in comparison to Nov 8 reporting, potentially not fully updated database

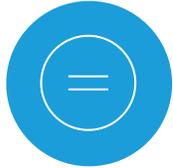
# 47 WHO Member States have vaccinated less than 10% of their population, and 107 less than 40%

Share of WHO Member States with coverage<sup>1</sup> of at least 10/40%



1. # of persons fully vaccinated as a proportion of total population  
2. No data available for Sahrawi Arab Democratic Republic

# All vaccines that have received WHO EUL are quality assured, safe and efficacious in preventing severe disease and death



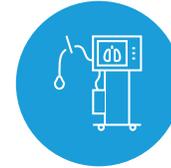
## Comparable to results of efficacy trials

- High comparability with clinical trial results, across vaccines



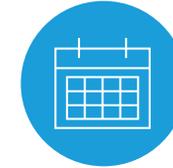
## Effectiveness against variants

- All EUL vaccines substantial protection against severe disease and death
- Some reduced protection against moderate/mild disease and infection



## Duration of protection

- Sustained protection against severe disease and death
- Difficult to separate waning protection over time vs. effect of Delta variant vs. methodological issues in studies



## Safety signals

- Benefits of vaccination far outweigh the known risks for all EUL vaccines
  - TTS for Adenoviral vector vaccines
  - Myocarditis for mRNA vaccines

## New Expression of Interest (Nov. 10) - Receive technology transfer for mRNA vaccines and become a mRNA vaccine manufacturer

- Given the current critical shortage of COVID-19 vaccines low- and middle-income countries (LMICs), **WHO and its partner, Medicines Patent Pool (MPP), are seeking to expand the capacity of LMICs to produce COVID-19 vaccines.**
- **WHO and MPP have facilitated the establishment of a mRNA technology transfer hub in South Africa** which will soon<sup>1</sup> be able to:
  - Provide appropriate training to interested manufacturers in LMICs.
  - Transfer a comprehensive technology transfer package.
- **Potential training and technology recipients from PAHO region** have already been **identified.**
- **WHO is now seeking expressions of interest from manufacturers elsewhere** (i.e. LMICs not in PAHO) **who would like to receive training and technology transfer for mRNA vaccines** with the objective of establishing mRNA vaccine production

See Expression of interest [here](#) (published on November 10, 2021)

1. We anticipate that initial training will be able to begin in Q1 2022 with full process and technology transfer later in the year.

## **Global COVID-19 vaccine rollout**

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## **Accelerating COVAX Supply Situation & Action by WHO Member States**

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## **Content**

# 475M doses have been delivered to 144 participants



956M

Doses allocated

566M

Doses Ordered

514M

Doses Released

475M

Doses Shipped

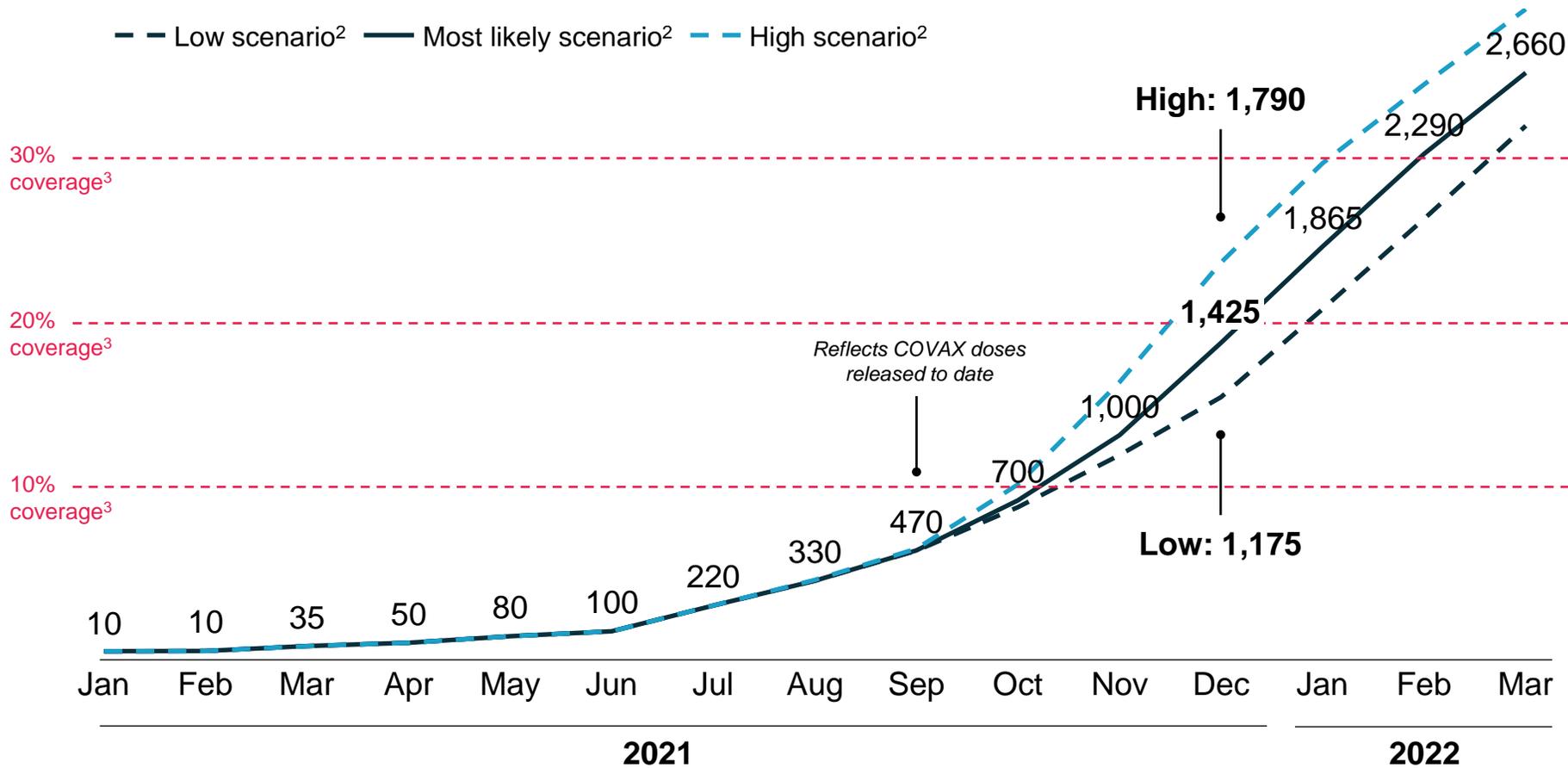
# COVAX Facility Supply Forecast

Ranged forecasts under low, most likely, and high scenarios

**PRELIMINARY AND SUBJECT TO ASSUMPTIONS**

**COVAX Forecasted Supply, Cumulative, M doses, 2021 and 2022<sup>1</sup>**

-- Low scenario<sup>2</sup> — Most likely scenario<sup>2</sup> - - High scenario<sup>2</sup>



## THREE BIGGEST DRIVERS OF UNCERTAINTY FOR COVAX SUPPLY

- Timing and extent to which export controls in India are eased..
- Manufacturers prioritising supply from global manufacturing networks to COVAX, allowing COVAX to access doses that it has already secured and paid for under its existing Advance Purchase Agreements.
- Timely regulatory approval of candidates that COVAX has signed deals with including those being developed by Novavax, SII-Novavax, and Clover.

<sup>1</sup> Timing of available supply is based on anticipated date of release by manufacturer, at which point doses become available for delivery. Timing of delivery to countries will be lagged due to need for local regulatory approvals, supply agreements, country readiness, export licenses, logistics, etc. Volumes for expected single-dose regimen candidates doubled to ensure comparability across vaccines. Volumes include dose donations that are committed to being delivered through COVAX. Volumes have been rounded to nearest 5M.

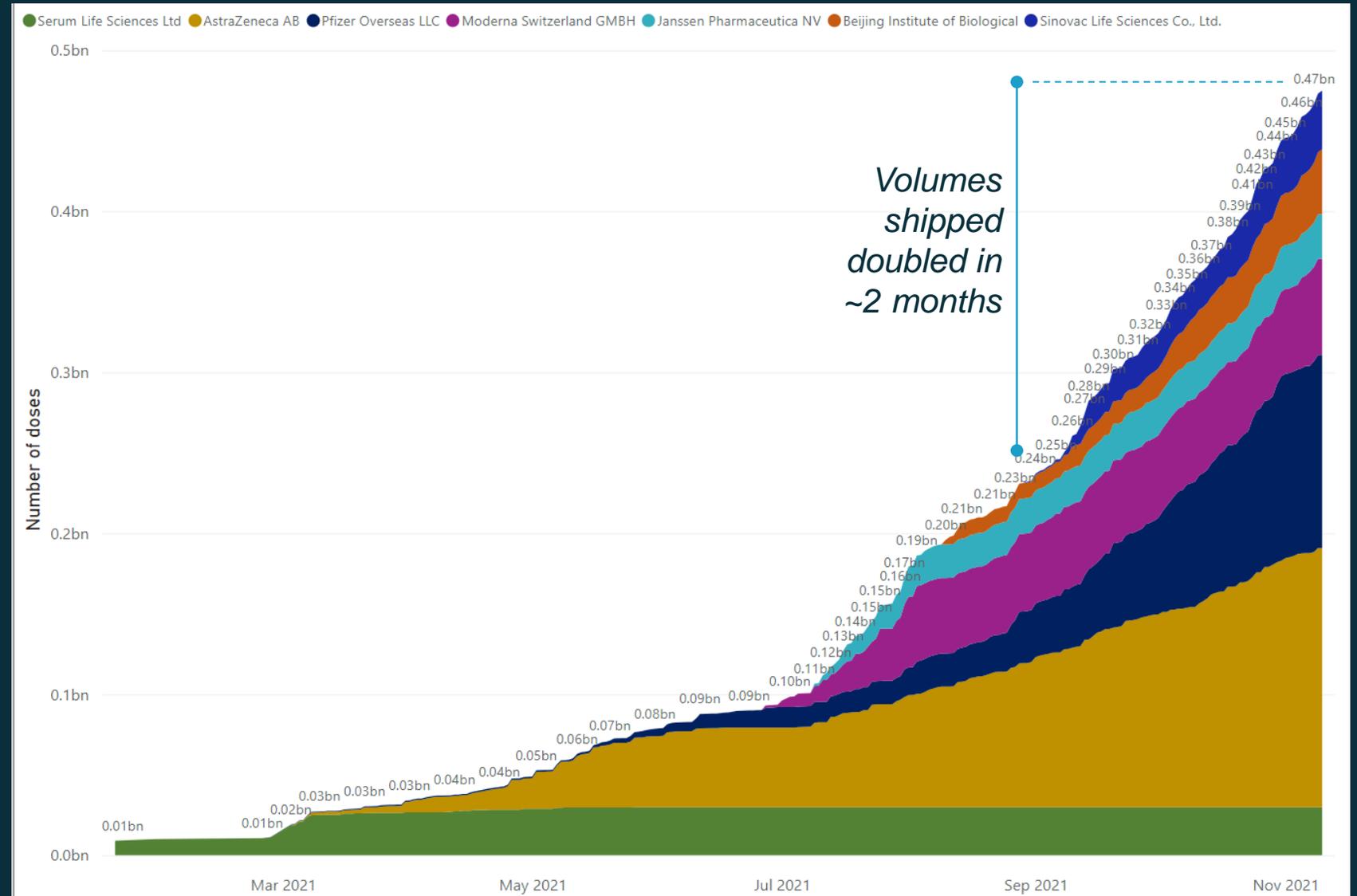
<sup>2</sup> Scenarios are based on best available information from manufacturers and analysis from Gavi and UNICEF on the impact and likelihood of potential mitigation efforts.

<sup>3</sup> Coverage refers to proportion of total population in AMC91 Participants that could be fully vaccinated with available volumes, assuming India receives 20% of AMC-funded volumes.

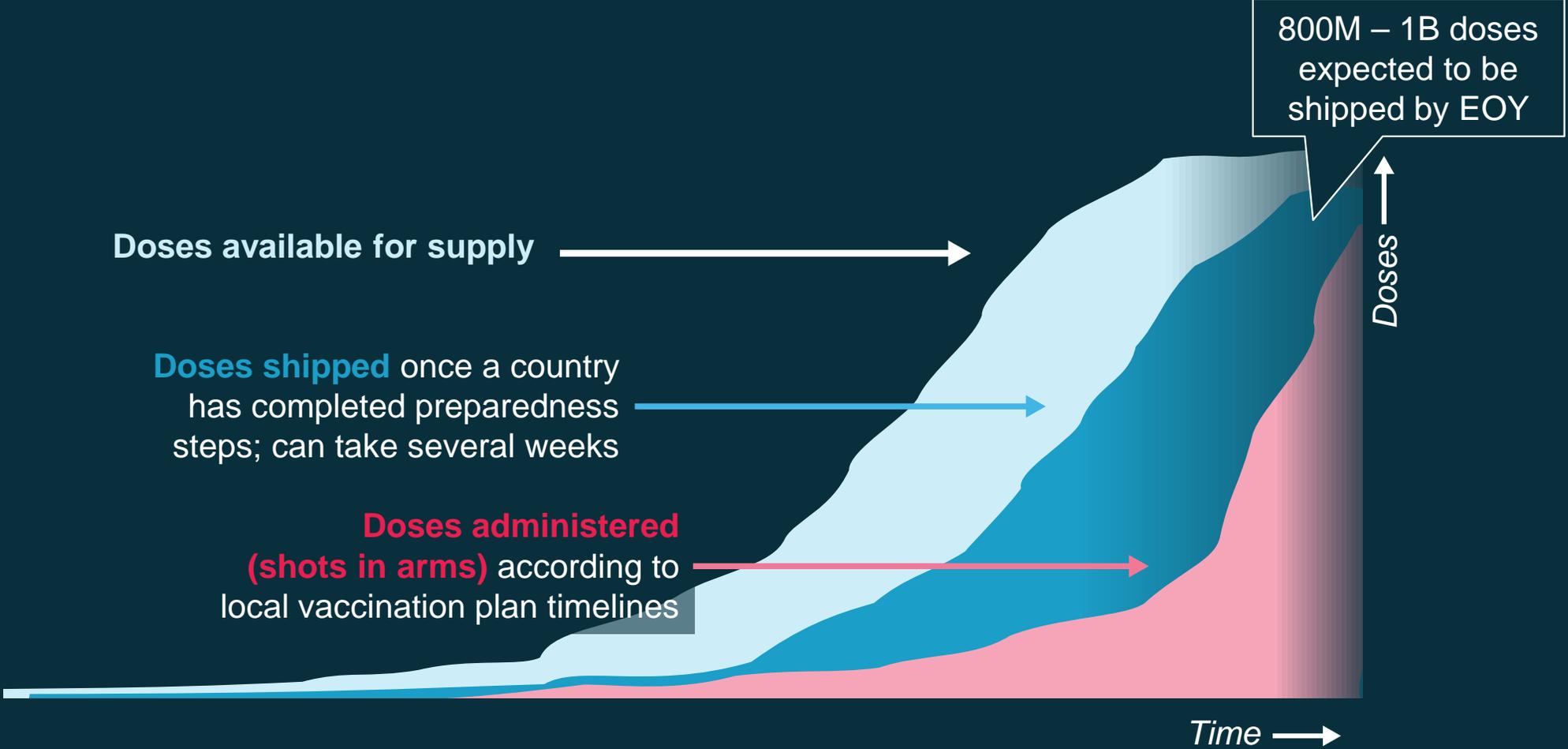
# Pace of shipments ramping up significantly

In past two months, COVAX delivered as many doses as in the first eight months combined

- COVAX faced with severe supply constraints in the past
- Multi-pronged effort to overcome challenges, building out the portfolio, working with manufacturers and donors
- Significant ramp up in deliveries over past months
- Expecting the next two months to bring another swell of doses on the path to 1Bn delivered by end of year



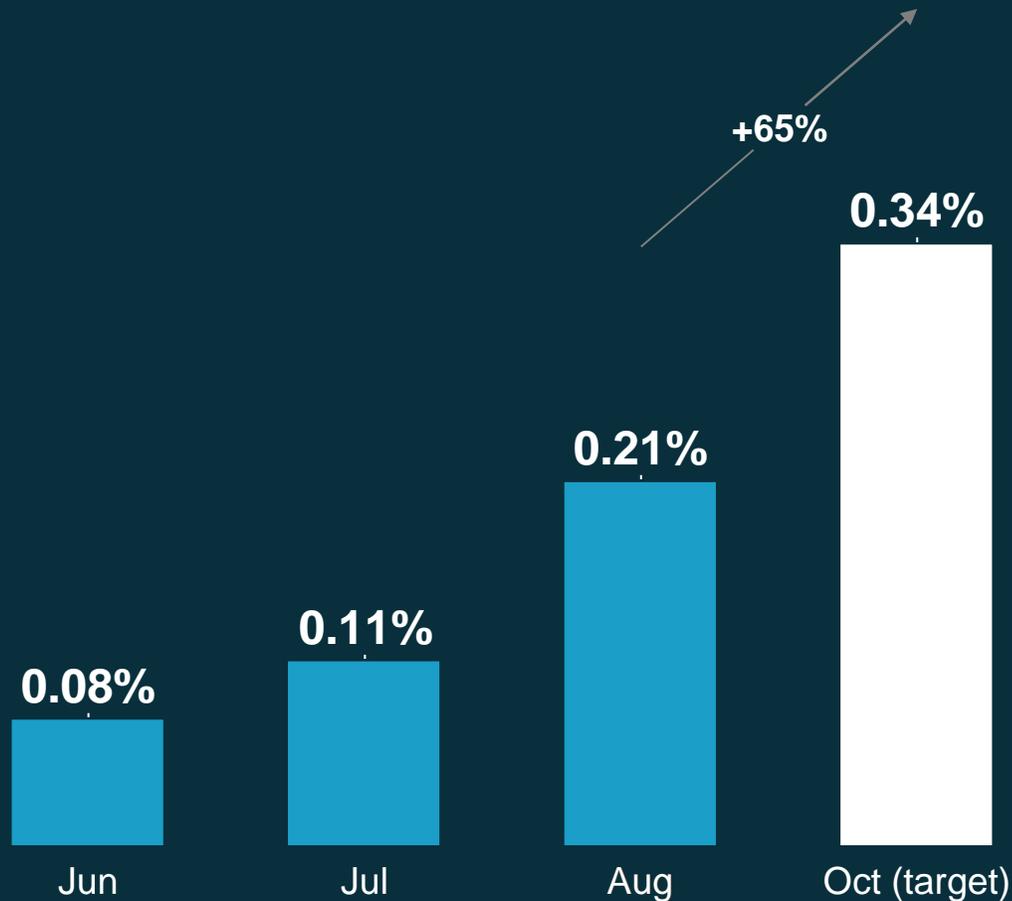
# There is a delay between doses made available for supply, doses shipped and shots-in-arms



# While absorption across AMC 92 is improving, constraints are dynamic and highly country specific

Aggregate absorption AMC 91 (excl. India), %  
*pop. vaccinated per day / Million doses per month*

## Commentary



Since June, average absorption across portfolio has increased >2.5X from 0.08% per day to 0.21%

Absorption is highly heterogenous:

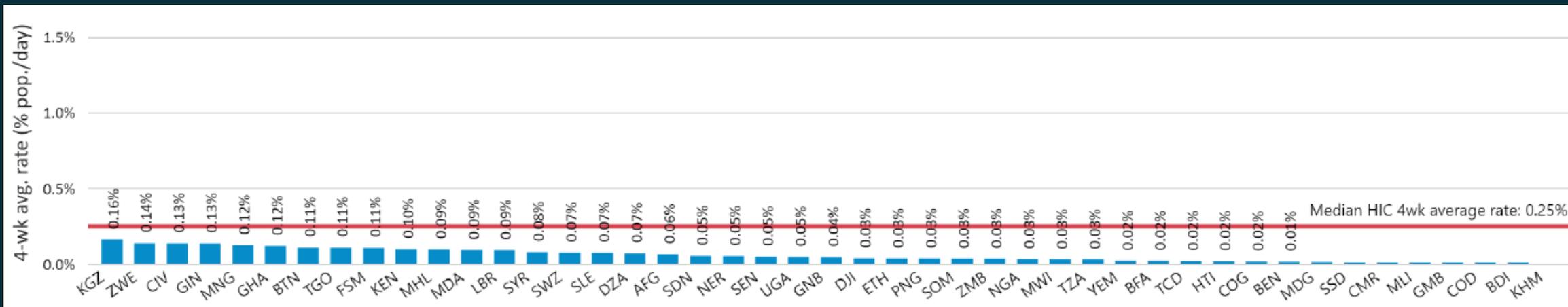
- **16 countries** reporting absorption rates > 0.5% per day with **10 countries** exceeding 0.8% per day monthly average
- **~20 lowest absorptive countries** still reporting rates <0.1% per day

## Takeaways

Ensuring delivery capacity across countries requires:

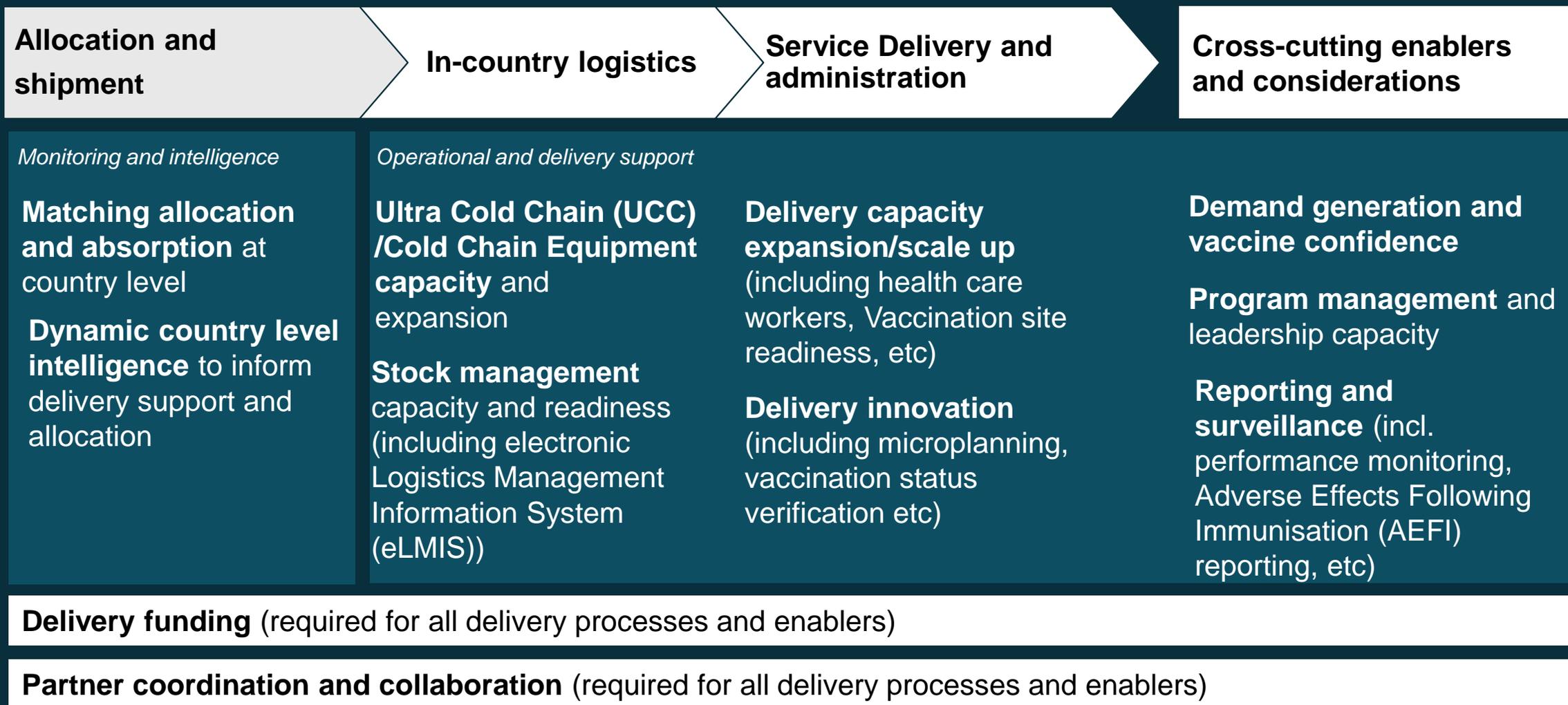
- **Continued focus on 'highest risk' countries** and developing bespoke country specific delivery enhancement plans
- **Ensuring predictable, high quality, scaled supply** that take country preferences and context into account

# Large variation in absorption rates across the AMC92



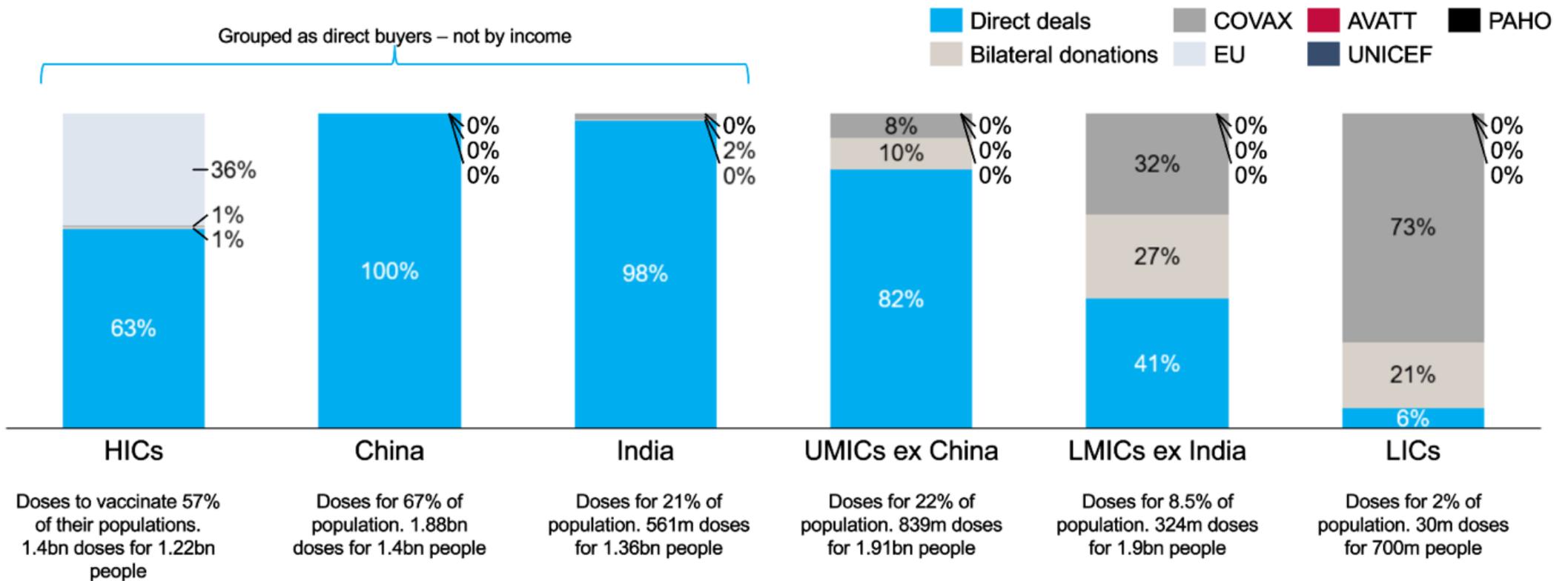
SOURCE: CRD Vaccination rate dataset

# We are providing support to mitigate delivery risk from allocation to administration



# Member states receive supply from multiple sources – COVAX critical for L(M)ICs

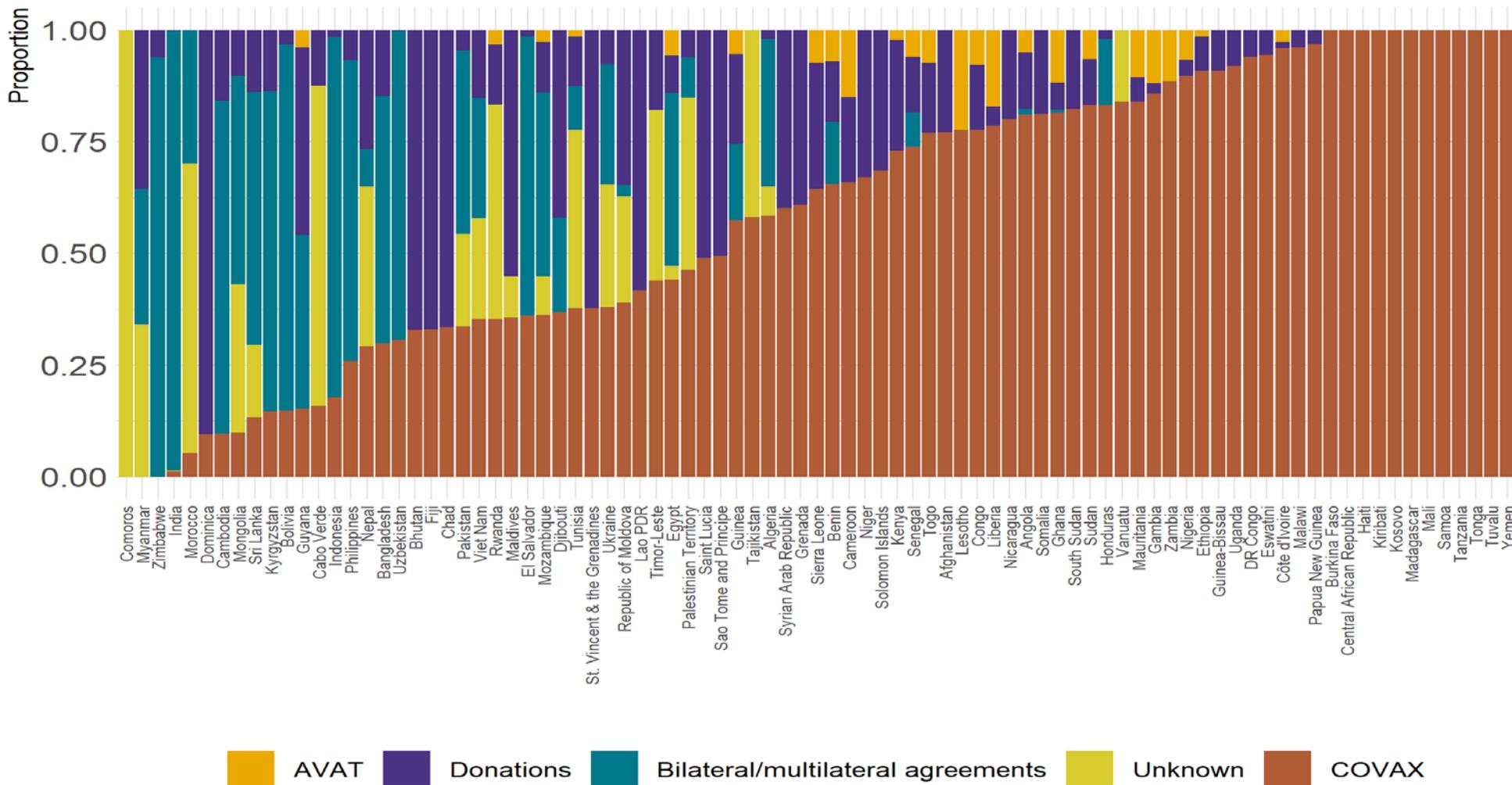
Delivered doses to date by market channel, %



Note: 58% of doses delivered as unknown, 2.9bn. All HIC, China and India unknown designated as bilateral deals, totaling 2.6bn. Of the remaining 303m: UMIC: 80% of unknown designated as bilateral deal, LMIC: 80% of unknown designated as donated doses, LIC: 100% of unknown designated as donated doses. Source: UNICEF COVID-19 Vaccine Market Dashboard



# Proportion of doses coming from COVAX: AMC92 participants



- 49 AMC participants have >50% doses coming from COVAX
- 20 AMC participants have >90% doses coming from COVAX (incl. Ethiopia, DRC and Uganda)

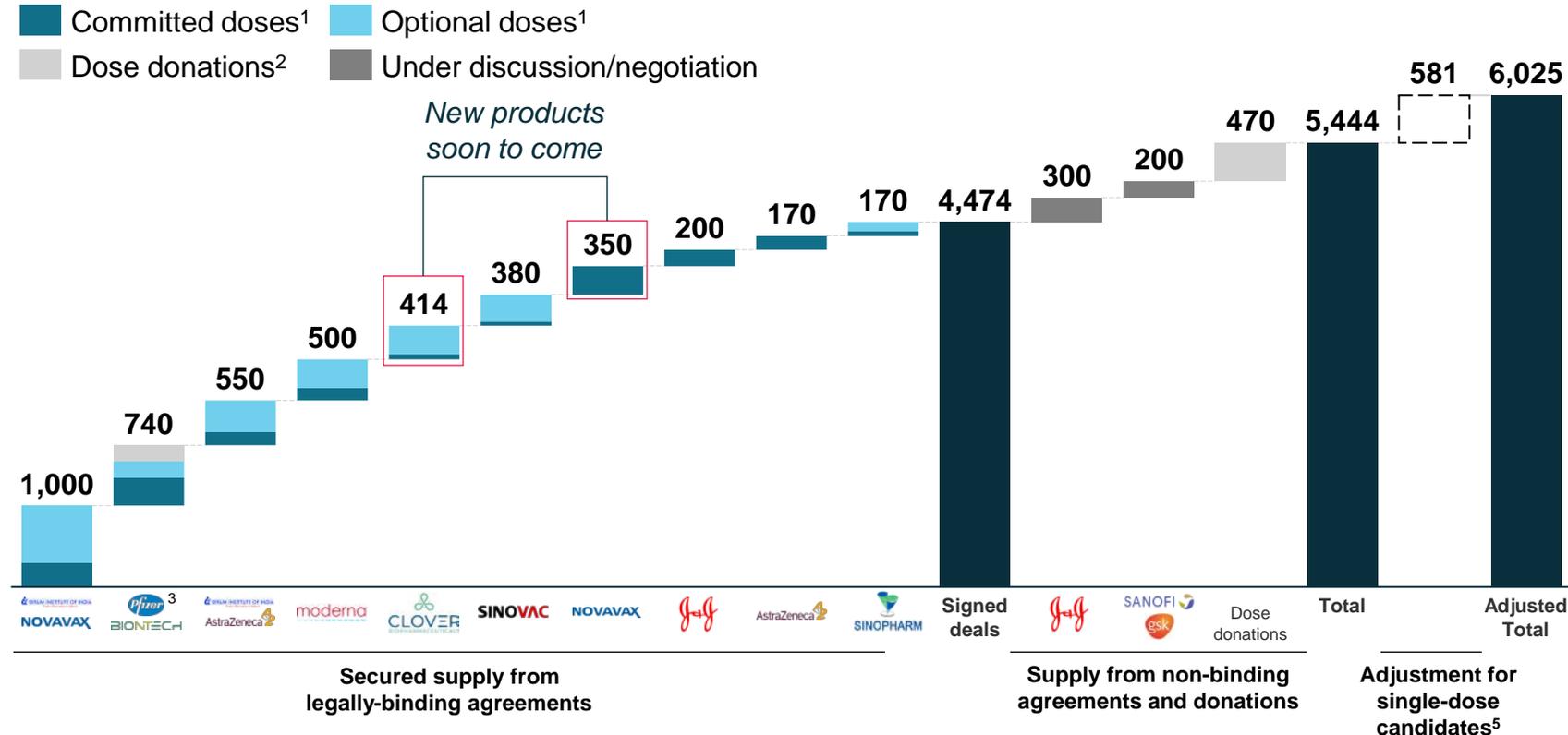
Source: UNICEF COVID-19 Vaccine Market Dashboard 28 Sept 2021

# COVAX Facility Portfolio

## Product-specific overview

**PRELIMINARY AND SUBJECT TO ASSUMPTIONS**

### COVAX Available Supply, M doses, 2021 and 2022



**There are currently eleven vaccines in the COVAX portfolio:**

1. SII: Covovax ("NVX-CoV2373")
2. SII: Covishield ("AZD1222")
3. Pfizer/BioNTech: BNT162b2
4. Moderna: mRNA 1273
5. Clover Biopharmaceuticals: SCB-2019 (CpG1018/Alum)
6. Sinovac: CoronaVac
7. Novavax : NVX-CoV2373
8. Janssen J&J<sup>4</sup>: Ad26COV2.S
9. AstraZeneca: ChAdOx1-S [recombinant] ("AZD1222")
10. Sinopharm: BBIBP-CorV
11. Sanofi-GSK: Recombinant Protein

1 "Committed doses" are doses that the COVAX Facility is required to procure. "Optional doses" are doses that the COVAX Facility has the option to procure in the future, but is not required to purchase. Once optional doses are exercised, they become committed doses.

2 "Dose donations" estimated based upon signed donor commitments to share new doses bilaterally with COVAX. Excludes announced, but not confirmed volumes. The transfer of COVAX allocations from SFPs to AMC Participants are already included in the volumes secured by COVAX from legally-binding agreements.

3 US support has allowed COVAX to secure an additional 500M Pfizer/BioNTech doses. Reflecting US funding above its original pledge, 200M of these are recorded as a donation.

4 COVAX has signed an Advance Purchase Agreement (APA) with Janssen for 200M doses; negotiations for an additional 300M doses are ongoing as per the Memorandum of Understanding announced on 18 December 2020.

5 In these supply forecasts, volumes for expected single-dose regimen candidates have been doubled to ensure comparability with two-dose candidates.

# Dose Donations Pledges and shipped (in millions)

Donations through COVAX

As of November 8<sup>th</sup>

Donor.	Donations Announced 2021-22	Total for AMC 2021 / (Total SFP+AMC 2021)	Total donated AMC 2021 <sup>5</sup> / (Total donated SFP+AMC 2021)	Total shipped AMC 2021/ (Total shipped 2021)
 <b>Team Europe</b>	400+ <sup>1,6</sup>	<b>275<sup>6</sup> /</b> (309 <sup>6</sup> )	<b>255/</b> (284)	<b>40/</b> (48)
 France	120 <sup>1</sup>	<b>59.6/</b> (64)	<b>60.5/</b> (64)	<b>15.1/</b> (15.1)
 Germany	175 <sup>1</sup>	<b>93/</b> (100)	<b>95/</b> (99)	<b>10.4/</b> (11.2)
 Italy	45 <sup>1</sup>	<b>41/</b> (45)	<b>38.5/</b> (41.4)	<b>4.4/</b> (7)
 Spain	50 <sup>1</sup>	<b>23/</b> (41)	<b>23/</b> (40.9)	<b>3.4/</b> (8.1)
 Portugal	4 <sup>1</sup>	<b>4/</b> (4)	<b>4/</b> (4)	<b>0.3/</b> (0.3)
 Norway	5	<b>5/</b> (5)	<b>4.7/</b> (4.7)	<b>1.4/</b> (1.4)
 Belgium	7.6	<b>7.1/</b> (7.6)	<b>7.1/</b> (7.6)	<b>1.6/</b> (1.8)
 Finland	3.65	<b>3.65/</b> (3.65)	<b>1.4/</b> (1.4)	<b>0.1/</b> (0.1)
 Sweden	At least 6	<b>5/</b> (5)	<b>4.4/</b> (4.4)	<b>2.8/</b> (2.8)
 Denmark	4	<b>3.7/</b> (3.7)	<b>3.7/</b> (3.7)	<b>0.6/</b> (0.8)
 Netherlands	27	<b>22/</b> (22)	<b>4.5/</b> (4.5)	<b>0</b> (0)
 Ireland	1.3 <sup>1</sup>	<b>1.3/</b> (1.3)	<b>1.3/</b> (1.3)	<b>0</b> (0)
 Others	7 <sup>2</sup>	<b>7/</b> (7)	<b>7/</b> (7) <sup>4</sup>	<b>0.09/</b> (0.09)
 <b>USA</b>	800+ <sup>3</sup>	<b>180/</b> (193)	<b>180/</b> (193)	<b>111/</b> (120)
 <b>Japan</b>	60 <sup>1</sup>	<b>17/</b> (18)	<b>8.3/</b> (11.3)	<b>8.3/</b> (11.3)
 <b>Switzerland</b>	4	<b>4/</b> (4)	<b>1.6/</b> (1.6)	<b>0.3/</b> (0.3)
 <b>New Zealand</b>	2.3	<b>2.3/</b> (2.3)	<b>0.9/</b> (0.9)	<b>0.2/</b> (0.2)
 <b>UK</b>	120 <sup>1</sup>	<b>25/</b> (25)	<b>16.2/</b> (16.2)	<b>6.2/</b> (6.2)
 <b>UAE</b>	1	<b>1/</b> (1)	<b>0/</b> (0)	<b>0</b> (0)
 <b>Canada</b>	51 <sup>7</sup>	<b>22/</b> (29)	<b>7.4/</b> (8.4)	<b>2.5/</b> (4.2)
 <b>Hong Kong SAR, China</b>	7.5	<b>3/</b> (3)	<b>7.5/</b> (7.5)	<b>0</b> (0)
<b>Total</b>	<b>~1,500+<sup>1</sup></b>	<b>~525+</b> (~580+)	<b>477/</b> (523)	<b>169/</b> (199)

Note: Total donated and delivered might not add up exactly due to rounding;

1. Primarily through COVAX, final amount estimated based on latest information shared by Donors;

2. Iceland, Estonia, Luxembourg, Greece, Croatia, Lithuania, Slovenia, Czech Republic;

3. US support has allowed COVAX to secure 1b Pfizer doses. These include a donation of 700m doses which are reflected in the total here.

4. Includes donations from Greece (2.6m), Luxembourg (0.18m), Iceland (0.27m), Croatia (0.65), Czech Republic (1.9), Slovenia (0.8m) and Lithuania (0.27m)

5. Doses made available for allocation

6. Sum of Team Europe Donor pledges

7. Canada has announced it will donate the equivalent of at least 200m doses to COVAX by end of 2022 (of which 51 are included here)

Note: In addition to values in this table, USA has facilitated the procurement of 300m additional Pfizer doses, of which 120m have been allocated, and 55m have already been delivered

# COVAX Facility Coverage objective for 2022: Principles

- COVAX to **contribute to the vaccination coverage goals countries set for themselves** towards the 70% WHO global vaccination goal
- COVAX Facility supply to be complemented by **bilateral / multilateral supply**; COVAX to collaborate with the Africa Union's African Vaccine Acquisition Trust (AVAT)
- **Pursue flexibility in the face of uncertainty by (1) continuing to invest in increased coverage and (2) establishing a contingency pool** to manage risk (e.g., boosters, paediatric vaccination, emergence of variants)

# COVAX

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Thank you